

ABSTRACT OF THE DISCLOSURE

A frame synchronization detecting circuit is provided which
is capable of efficiently reducing power consumption in a hunting
5 state.

The frame synchronization detecting circuit composed of a
frame synchronization pattern detecting circuit, a receiver frame
counter and a state transition judging circuit has an in-house
phase frame counter adapted to produce a receiving frame enable

10 signal having a pulse width of " $2\delta + \alpha$ " (nsec) in a timing manner
that an in-house frame pulse (FP) rises at a midpoint of the pulse
width of the receiving frame enable signal. While the frame
synchronization detecting circuit is in a hunting state in which
a frame synchronization pattern is being sought by the frame
15 synchronization pattern detecting circuit, only when the above
receiving frame enable signal is in an enable state, a
synchronization clock is fed to the frame synchronization pattern
detecting circuit and the state transition judging circuit.

100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-4010-4011-4012-4013-4014-4015-4016-4017-4018-4019-4020-4021-4022-4023-4024-4025-4026-4027-4028-4029-4030-4031-4032-4033-4034-4035-4036-4037-4038-4039-4040-4041-4042-4043-4044-4045-4046-4047-4048-4049-4050-4051-4052-4053-4054-4055-4056-4057-4058-4059-4060-4061-4062-4063-4064-4065-4066-4067-4068-4069-4070-4071-4072-4073-4074-4075-4076-4077-4078-4079-4080-4081-4082-4083-4084-4085-4086-4087-4088-4089-4090-4091-4092-4093-4094-4095-4096-4097-4098-4099-40100-40101-40102-40103-40104-40105-40106-40107-40108-40109-40110-40111-40112-40113-40114-40115-40116-40117-40118-40119-40120-40121-40122-40123-40124-40125-40126-40127-40128-40129-40130-40131-40132-40133-40134-40135-40136-40137-40138-40139-40140-40141-40142-40143-40144-40145-40146-40147-40148-40149-40150-40151-40152-40153-40154-40155-40156-40157-40158-40159-40160-40161-40162-40163-40164-40165-40166-40167-40168-40169-40170-40171-40172-40173-40174-40175-40176-40177-40178-40179-40180-40181-40182-40183-40184-40185-40186-40187-40188-40189-40190-40191-40192-40193-40194-40195-40196-40197-40198-40199-40200-40201-40202-40203-40204-40205-40206-40207-40208-40209-402010-402011-402012-402013-402014-402015-402016-402017-402018-402019-402020-402021-402022-402023-402024-402025-402026-402027-402028-402029-402030-402031-402032-402033-402034-402035-402036-402037-402038-402039-402040-402041-402042-402043-402044-402045-402046-402047-402048-402049-402050-402051-402052-402053-402054-402055-402056-402057-402058-402059-402060-402061-402062-402063-402064-402065-402066-402067-402068-402069-402070-402071-402072-402073-402074-402075-402076-402077-402078-402079-402080-402081-402082-402083-402084-402085-402086-402087-402088-402089-402090-402091-402092-402093-402094-402095-402096-402097-402098-402099-4020100-4020101-4020102-4020103-4020104-4020105-4020106-4020107-4020108-4020109-4020110-4020111-4020112-4020113-4020114-4020115-4020116-4020117-4020118-4020119-40201100-40201101-40201102-40201103-40201104-40201105-40201106-40201107-40201108-40201109-40201110-40201111-40201112-40201113-40201114-40201115-40201116-40201117-40201118-40201119-402011100-402011101-402011102-402011103-402011104-402011105-402011106-402011107-402011108-402011109-402011110-402011111-402011112-402011113-402011114-402011115-402011116-402011117-402011118-402011119-4020111100-4020111101-4020111102-4020111103-4020111104-4020111105-4020111106-4020111107-4020111108-4020111109-4020111110-4020111111-4020111112-4020111113-4020111114-4020111115-4020111116-4020111117-4020111118-4020111119-40201111100-40201111101-40201111102-40201111103-40201111104-40201111105-40201111106-40201111107-40201111108-40201111109-40201111110-40201111111-40201111112-40201111113-40201111114-40201111115-40201111116-40201111117-40201111118-40201111119-402011111100-402011111101-402011111102-402011111103-402011111104-402011111105-402011111106-402011111107-402011111108-402011111109-402011111110-402011111111-402011111112-402011111113-402011111114-402011111115-402011111116-402011111117-402011111118-402011111119-4020111111100-4020111111101-4020111111102-4020111111103-4020111111104-4020111111105-4020111111106-4020111111107-4020111111108-4020111111109-4020111111110-4020111111111-4020111111112-4020111111113-4020111111114-4020111111115-4020111111116-4020111111117-4020111111118-4020111111119-40201111111100-40201111111101-40201111111102-40201111111103-40201111111104-40201111111105-40201111111106-40201111111107-40201111111108-40201111111109-40201111111110-40201111111111-40201111111112-40201111111113-40201111111114-40201111111115-40201111111116-40201111111117-40201111111118-40201111111119-402011111111100-402011111111101-402011111111102-402011111111103-402011111111104-402011111111105-402011111111106-402011111111107-402011111111108-402011111111109-402011111111110-402011111111111-402011111111112-402011111111113-402011111111114-402011111111115-402011111111116-402011111111117-402011111111118-402011111111119-4020111111111100-4020111111111101-4020111111111102-4020111111111103-4020111111111104-4020111111111105-4020111111111106-4020111111111107-4020111111111108-4020111111111109-4020111111111110-4020111111111111-4020111111111112-4020111111111113-4020111111111114-4020111111111115-4020111111111116-4020111111111117-4020111111111118-4020111111111119-40201111111111100-40201111111111101-40201111111111102-40201111111111103-40201111111111104-40201111111111105-40201111111111106-40201111111111107-40201111111111108-40201111111111109-40201111111111110-40201111111111111-40201111111111112-40201111111111113-40201111111111114-40201111111111115-40201111111111116-40201111111111117-40201111111111118-40201111111111119-402011111111111100-402011111111111101-402011111111111102-402011111111111103-402011111111111104-402011111111111105-402011111111111106-402011111111111107-402011111111111108-402011111111111109-402011111111111110-402011111111111111-402011111111111112-402011111111111113-402011111111111114-402011111111111115-402011111111111116-402011111111111117-402011111111111118-402011111111111119-4020111111111111100-4020111111111111101-4020111111111111102-4020111111111111103-4020111111111111104-4020111111111111105-4020111111111111106-4020111111111111107-4020111111111111108-4020111111111111109-4020111111111111110-4020111111111111111-4020111111111111112-4020111111111111113-4020111111111111114-4020111111111111115-4020111111111111116-4020111111111111117-4020111111111111118-4020111111111111119-40201111111111111100-40201111111111111101-40201111111111111102-40201111111111111103-40201111111111111104-40201111111111111105-40201111111111111106-40201111111111111107-40201111111111111108-40201111111111111109-40201111111111111110-40201111111111111111-40201111111111111112-40201111111111111113-40201111111111111114-40201111111111111115-40201111111111111116-40201111111111111117-40201111111111111118-40201111111111111119-402011111111111111100-402011111111111111101-402011111111111111102-402011111111111111103-402011111111111111104-402011111111111111105-402011111111111111106-402011111111111111107-402011111111111111108-402011111111111111109-402011111111111111110-402011111111111111111-402011111111111111112-402011111111111111113-402011111111111111114-402011111111111111115-402011111111111111116-402011111111111111117-402011111111111111118-402011111111111111119-4020111111111111111100-4020111111111111111101-4020111111111111111102-4020111111111111111103-4020111111111111111104-4020111111111111111105-4020111111111111111106-4020111111111111111107-4020111111111111111108-4020111111111111111109-4020111111111111111110-4020111111111111111111-4020111111111111111112-4020111111111111111113-4020111111111111111114-4020111111111111111115-4020111111111111111116-4020111111111111111117-4020111111111111111118-4020111111111111111119-40201111111111111111100-40201111111111111111101-40201111111111111111102-40201111111111111111103-40201111111111111111104-40201111111111111111105-40201111111111111111106-40201111111111111111107-40201111111111111111108-40201111111111111111109-40201111111111111111110-40201111111111111111111-40201111111111111111112-40201111111111111111113-40201111111111111111114-40201111111111111111115-40201111111111111111116-40201111111111111111117-40201111111111111111118-40201111111111111111119-402011111111111111111100-402011111111111111111101-402011111111111111111102-402011111111111111111103-402011111111111111111104-402011111111111111111105-402011111111111111111106-402011111111111111111107-402011111111111111111108-402011111111111111111109-402011111111111111111110-402011111111111111111111-402011111111111111111112-402011111111111111111113-402011111111111111111114-402011111111111111111115-402011111111111111111116-402011111111111111111117-402011111111111111111118-402011111111111111111119-4020111111111111111111100-4020111111111111111111101-4020111111111111111111102-4020111111111111111111103-4020111111111111111111104-4020111111111111111111105-4020111111111111111111106-4020111111111111111111107-4020111111111111111111108-4020111111111111111111109-4020111111111111111111110-4020111111111111111111111-4020111111111111111111112-4020111111111111111111113-4020111111111111111111114-4020111111111111111111115-4020111111111111111111116-4020111111111111111111117-4020111111111111111111118-4020111111111111111111119-40201111111111111111111100-40201111111111111111111101-40201111111111111111111102-40201111111111111111111103-40201111111111111111111104-40201111111111111111111105-40201111111111111111111106-40201111111111111111111107-40201111111111111111111108-40201111111111111111111109-40201111111111111111111110-40201111111111111111111111-40201111111111111111111112-40201111111111111111111113-40201111111111111111111114-40201111111111111111111115-40201111111111111111111116-40201111111111111111111117-40201111111111111111111118-40201111111111111111111119-402011111111111111111111100-402011111111111111111111101-402011111111111111111111102-402011111111111111111111103-402011111111111111111111104-402011111111111111111111105-402011111111111111111111106-402011111111111111111111107-402011111111111111111111108-402011111111111111111111109-402011111111111111111111110-402011111111111111111111111-402011111111111111111111112-402011111111111111111111113-402011111111111111111111114-402011111111111111111111115-402011111111111111111111116-402011111111111111111111117-402011111111111111111111118-402011111111111111111111119-4020111111111111111111111100-4020111111111111111111111101-4020111111111111111111111102-4020111111111111111111111103-4020111111111111111111111104-4020111111111111111111111105-4020111111111111111111111106-4020111111111111111111111107-4020111111111111111111111108-4020111111111111111111111109-4020111111111111111111111110-4020111111111111111111111111-4020111111111111111111111112-4020111111111111111111111113-4020111111111111111111111114-4020111111111111111111111115-4020111111111111111111111116-4020111111111111111111111117-4020111111111111111111111118-4020111111111111111111111119-40201111111111111111111111100-40201111111111111111111111101-40201111111111111111111111102-40201111111111111111111111103-40201111111111111111111111104-40201111111111111111111111105-40201111111111111111111111106-40201111111111111111111111107-40201111111111111111111111108-40201111111111111111111111109-40201111111111111111111111110-40201111111111111111111111111-40201111111111111111111111112-40201111111111111111111111113-40201111111111111111111111114-40201111111111111111111111115-40201111111111111111111111116-40201111111111111111111111117-40201111111111111111111111118-40201111111111111111111111119-402011111111111111111111111100-402011111111111111111111111101-402011111111111111111111111102-402011111111111111111111111103-402011111111111111111111111104-402011111111111111111111111105-402011111111111111111111111106-402011111111111111111111111107-402011111111111111